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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,653

02/25/2004

Chad D. Overvaag

380-165 CIP

2840

1009

7590

02/27/2007

KING & SCHICKLI, PLLC
247 NORTH BROADWAY
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EXAMINER

TILL, TERRENCE R

ART UNIT

PAPER NUMBER

1744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/786,653

Applicant(s)

OVERVAAG ET AL.

Examiner

Terrence R. Till

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1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/6/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the dirt cup that includes a dirt collection chamber having a cylindrical sidewall and a tangentially directed inlet to provide cyclonic airflow (claims 3 and 14) and a replaceable dust bag (claims 4 and 15) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference character

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“36” is not shown in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: It is noted that throughout the specification (page 9, line 19; page 11, line 13) and claims (claims 9 and 20), the word “zenon” is a misspelling of --xenon--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Boshier (US 5,311,639).

6. The patent to Boshier discloses a canister vacuum cleaner, comprising a main housing 80 that includes a dirt cup (lower container portion) carried by said main housing; a suction

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generator, located above the dirt cup, as is typical of "shop-vac" cleaners (see column 5, lines 35-42) carried by said main housing; a wand 40 having a first end and a second end; a hose 82 providing fluid communication between said first end of said wand and said suction generator; a light source carried on said canister vacuum cleaner at a first point (see column 5, lines 20-30) and a light transmitter (fiber optic bundle) extending from said light source at said first point to a second point on said canister vacuum cleaner remote from said first point whereby light from said light source is directed past said second end of said wand onto a surface being cleaned.

7. Claims 1, 6, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Lawrence et al. (US 5,207,498).

8. The patent to Lawrence et al. discloses a canister vacuum cleaner, comprising a main housing (see column 4, lines 65-69) that includes a dirt collector (inherent) carried by said main housing; a suction generator carried by said main housing (inherent- part of main housing) a wand (see column 5, lines 5-10) having a first end and a second end; a hose (see column 5, lines 5-10) providing fluid communication between said first end of said wand and said suction generator; a light source 24 carried on said canister vacuum cleaner at a first point and a light transmitter 40 extending from said light source at said first point to a second point on said canister vacuum cleaner remote from said first point whereby light from said light source is directed past said second end of said wand onto a surface being cleaned. Lawrence is also considered to disclose the light source is an incandescent bulb, a light director is carried on said canister vacuum cleaner at said second point, said light director/transmitter being a prism. It should be noted that the light director and light transmitter are embodied by a single element 40.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawrence et al. (US 5,207,498) in view of Duggan (US 2003/0182756).

13. The patent to Lawrence et al. does not disclose a dirt cup that includes a dirt collection chamber having a cylindrical sidewall and a tangentially directed inlet to provide cyclonic

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airflow. Lawrence et al. do disclose that the device can be part of a canister-type vacuum cleaner, but do not disclose of the specifics. The publication to Duggan discloses a canister-type vacuum cleaner "A" with a dirt cup 50 that includes a dirt collection chamber having a cylindrical sidewall 56 and a tangentially directed inlet 78 (figure 2) to provide cyclonic airflow. It would have been obvious to a person skilled in the art at the time the invention was made to provide the device of Lawrence et al. with a canister portion that has a dirt collection chamber having a cylindrical sidewall and a tangentially directed inlet to provide cyclonic airflow in view of the teaching of Duggan as use of such cyclonic action canisters were known at the time of the invention and selection of a cyclonic separation member or a bag filter is within the purview of one skilled in the art.

14. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lawrence et al. (US 5,207,498) in view of Batson et al. (US 3,668,842).

15. The patent to Lawrence et al. does not disclose a dirt collector that is a replaceable dust bag. Lawrence et al. do disclose that the device can be part of a canister-type vacuum cleaner, but do not disclose of the specifics. Use of replaceable dust bags are old and well known in the art. The patent to Batson et al. discloses a canister-type vacuum cleaner (figure 1) with a dirt collector that is a replaceable dust bag 81. It would have been obvious to a person skilled in the art at the time the invention was made to provide the device of Lawrence et al. with a canister portion that has a dirt collector that is a replaceable dust bag in view of the teaching of Batson et al. as use of a dirt collector that is a replaceable dust bag were known at the time of the invention and selection of a bag filter is within the purview of one skilled in the art.

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16. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lawrence et al. (US 5,207,498) in view of Ruff (US 2003/0196293).

17. The patent to Lawrence et al. discloses the claimed invention except that the light source used is an incandescent bulb instead of a light emitting diode. The publication to Ruff shows that a light emitting diode (see paragraph 19) for illuminating an area to be cleaned is an equivalent structure known in the art. Therefore, because these two light sources were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the incandescent bulb of Lawrence et al. for the light emitting diode of Ruff.

18. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawrence et al. (US 5,207,498) in view of Woo et al. (US 5,896,618).

19. With respect to claims 7 and 8, the patent to Lawrence et al. discloses the claimed invention except that the light source used is an incandescent bulb instead of a fluorescent bulb, halogen bulb or xenon bulb. The patent to Woo et al. shows that a halogen bulb, which is a type of fluorescent bulb, for illuminating an area to be cleaned is an equivalent structure known in the art. Therefore, because these two light sources were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the incandescent bulb of Lawrence et al. for the halogen bulb of Woo et al. With respect to claim 9, although neither Lawrence et al. nor Woo et al. disclose a xenon bulb, given the teachings of Woo et al., it would have been obvious to a person skilled in the art at the time the invention was made to provide Lawrence et al. with a xenon bulb instead of an incandescent bulb, as selection

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of any of these known equivalents to illuminate an area to be cleaned would be within the level of ordinary skill in the art.

20. Claims 12-14, 17, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. (US 6,003,196) in view of Lawrence et al. (US 5,207,498).

21. The patent to Wright et al. discloses a floor cleaning apparatus, comprising: a nozzle assembly C with a suction opening 26; a canister assembly B pivotally connected to said nozzle assembly; a suction generator E carried by one of said canister assembly and said nozzle assembly; a dirt collector G,H carried by one of said canister assembly and said nozzle assembly; a wand and hose assembly 82 carried by one of said canister assembly and said nozzle assembly and in selective fluid communication with said suction generator. Wright et al. additionally disclose said dirt collector is a dirt cup 52 and said dirt cup includes a dirt collection chamber having a cylindrical shape and a tangentially directed inlet 80 to provide cyclonic airflow. Wright et al. do not disclose any type of illumination device for illuminating an area to be cleaned. The patent to Lawrence et al. discloses an illumination device having a light source 24 carried on said floor cleaning apparatus at a first point; and a light transmitter/director 40 extending substantially between said first point and a second point on said floor cleaning apparatus whereby light from said light source is directed past said wand onto a surface being cleaned. Lawrence is also considered to disclose the light source is an incandescent bulb, a light director is carried on said canister vacuum cleaner at said second point, said light director/transmitter being a prism. It should be noted that the light director and light transmitter are embodied by a single element 40. Lastly Lawrence et al. discloses that "the present invention can be used in the motor driven nozzle of a canister vacuum cleaner, or in the base of an upright

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vacuum cleaner.” Therefore It would have been obvious to a person skilled in the art at the time the invention was made to provide nozzle assembly of Wright et al. with the illumination device of Lawrence et al. in order to illuminate an area to be cleaned.

22. Claims 12-14, 17, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US 5,331,715) in view of Lawrence et al. (US 5,207,498).

23. The patent to Johnson et al. discloses a floor cleaning apparatus, comprising: a nozzle assembly 14 with a suction opening 32; a canister assembly 12 pivotally connected to said nozzle assembly; a suction generator 23 carried by one of said canister assembly and said nozzle assembly; a dirt collector 30 carried by one of said canister assembly and said nozzle assembly; a wand and hose assembly 40,46,48 carried by one of said canister assembly and said nozzle assembly and in selective fluid communication with said suction generator. Johnson et al. additionally disclose said dirt collector is a replaceable dust bag. Johnson et al. do not disclose any type of illumination device for illuminating an area to be cleaned. The patent to Lawrence et al. discloses an illumination device having a light source 24 carried on said floor cleaning apparatus at a first point; and a light transmitter/director 40 extending substantially between said first point and a second point on said floor cleaning apparatus whereby light from said light source is directed past said wand onto a surface being cleaned. Lawrence is also considered to disclose the light source is an incandescent bulb, a light director is carried on said canister vacuum cleaner at said second point, said light director/transmitter being a prism. It should be noted that the light director and light transmitter are embodied by a single element 40. Lastly Lawrence et al. discloses that “the present invention can be used in the motor driven nozzle of a canister vacuum cleaner, or in the base of an upright vacuum cleaner.” Therefore It would have

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been obvious to a person skilled in the art at the time the invention was made to provide nozzle assembly of Johnson et al. with the illumination device of Lawrence et al. in order to illuminate an area to be cleaned.

24. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, as modified by Lawrence et al., as applied to claim 12 above, and further in view of Ruff (US 2003/0196293).

25. Johnson, as modified by Lawrence et al., discloses the claimed invention except that the light source used is an incandescent bulb instead of a light emitting diode. The publication to Ruff shows that a light emitting diode (see paragraph 19) for illuminating an area to be cleaned is an equivalent structure known in the art. Therefore, because these two light sources were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the incandescent bulb of Johnson, as modified by Lawrence et al., for the light emitting diode of Ruff.

26. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, as modified by Lawrence et al., as applied to claim 12 above, and further in view of Woo et al. (US 5,896,618).

27. With respect to claims 18 and 19, the patent to Johnson, as modified by Lawrence et al., discloses the claimed invention except that the light source used is an incandescent bulb instead of a fluorescent bulb, halogen bulb or xenon bulb. The patent to Woo et al. shows that a halogen bulb, which is a type of fluorescent bulb, for illuminating an area to be cleaned is an equivalent structure known in the art. Therefore, because these two light sources were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found

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it obvious to substitute the incandescent bulb of Johnson, as modified by Lawrence et al., for the halogen bulb of Woo et al. With respect to claim 20, although neither Johnson, as modified by Lawrence et al., nor Woo et al. disclose a xenon bulb, given the teachings of Woo et al., it would have been obvious to a person skilled in the art at the time the invention was made to provide Lawrence et al. with a xenon bulb instead of an incandescent bulb, as selection of any of these known equivalents to illuminate an area to be cleaned would be within the level of ordinary skill in the art.

Conclusion

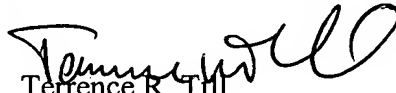
28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US patent to McCormick and Japanese patent to Oya show the current state of the art in illumination devices for vacuums.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Till whose telephone number is (571) 272-1280. The examiner can normally be reached on Mon. through Thurs. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys P. Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Terrence R. Till
Primary Examiner
Art Unit 1744

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